Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
GMA	106-91-2	HEGTOXCHRM Micronucleus Assay	40 CFR 798.5395	mice	intraperitoneal injection	75, 150, 300 mg/kg	5/sex	GMA) was negative in the mouse micronucleus test	61 FR 3403; 1/31/96, Docket# 44620
GMA	106-91-2	HEGTOXMUTA Gene mutations in Somatic cells in culture	40 CFR 798.5300	Chinese hamsters, ovary	*in vitro*	5 to 80µg/mL (w/o S-9), 25 to 600 µg/mL (with S-9).	Not Applicable	GMA was negative in the CHO/HGPRT test in the absence of S-9 activation. However, it induced a weak positive response in the presence of S-9.	61 FR 3403; 1/31/96, Docket# 44620
GMA	106-91-2	HENEUR Neuropathology, subchronic	40 CFR 798.6400 (modified)	rats	inhalation, 6 hr/day. 5 d/wk, 13 weeks	0.5, 2, 15 ppm	Not specified	There were no treatment-related neurotoxic effects, including a comprehensive neuropathological examination, observed at any exposure level. Thus the NOEL was 15 ppm. At 4 weeks there was a low incidence of nasal discharge and enlarged nostrils at 2 and 15 ppm presumed to be related to nasal irritation.	61 FR 67334; 12/20/96, Docket# 44633
GMA	106-91-2	HENEUR Motor activity, subchronic	40 CFR 798.6200 (modified)	rats	inhalation, 6 hr/day. 5 d/wk, 13 weeks	0.5, 2, 15 ppm	Not specified	There were no treatment-related neurotoxic effects, including motor activity, observed at any exposure level. Thus the NOEL was 15 ppm.	61 FR 67334; 12/20/96, Docket# 44633
GMA	106-91-2	HENEUR Functional Obser-vational Battery, subchronic	40 CFR 798.6050 (modified)	rats	inhalation, 6 hr/day. 5 d/wk, 13 weeks	0.5, 2, 15 ppm	Not specified	There were no treatment-related neurotoxic effects observed at any exposure level. Thus the NOEL was 15 ppm. In addition to the FOB evaluation, the post exposure neurotoxicity evaluation included evoked potential testing of the visual (FEP), auditory (ABR), and somatosensory system (SEP), and caudal nerves.	61 FR 67334; 12/20/96, Docket# 44633
GMA	106-91-2	HERTOXTERA Developmental toxicity	Non-TSCA Protocol/Guideline (see docket# OPPTS-42178)	New Zealand White Rabbits (time-mated)	inhalation, gestation days 7 through 19	0.5, 2.0, 10.0 ppm	18 females	There were no significant treatment-related effects on body weight, body weight gain, gross pathologic changes, or absolute or relative liver or kidney weights at any exposure level. Treatment-related degeneration of the nasal olfactory epithelium was present in the majority of rabbits from the 2 and 10 ppm groups. Erosions, ulcers of the olfactory and respiratory epithelium, and an increased incidence of subacute to chronic inflammation of the respiratory epithelium were noted in the 10 ppm group. The maternal NOEL for treatment-related histopathologic changes was 0.5 ppm. The NOEL for embryonal/fetal toxicity and teratogenicity was 10 ppm.	61 FR 17700; 4/22/96, Docket# 44624

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GMA	106-91-2	HESTOX Subchronic Toxicity	Non-TSCA Protocol/Guideline (see docket# OPPTS-42178)	rats	inhalation, 6 hr/day. 5 d/wk, 13 weeks	0.5, 2, 15 ppm	10/sex	There were no treatment-related in-life observations noted during the 13-week exposure period. There were no significant treatment-related effects on body weight, urinalysis, clinical chemistry or hematology parameters, as well as gross pathological changes or organ weights at any exposure level. Histopathologically, slight hyperplasia of the respiratory epithelium of the nasal tissue was present in all rats at 15 ppm. There were no treatment-related effects at 0.5 or 2 ppm. Thus the NOEL was 2 ppm.	61 FR 58688 11/18/96, Docket# 44632
AGE	120547-52-6	HEGTOXCHRM Micronucleus assay	40 CFR 798.5295	mice	intraperitoneal injection	1000, 2000, 4000 mg/kg bw	5/sex	Slight reductions (up to 11%) in the ratio of polychromatic erythrocytes to total erythrocytes were observed. Results indicate that the test substance does not induce a significant increased in micronucleated polychromatic erythrocytes and was determined to be negative in the mouse micronucleus assay.	62 FR 39520; 7/23/97 Docket# OPPTS-44641
AGE	120547-52-6	HEGTOXMUTA Gene mutations in somatic cells in culture	40 CFR 798.5300	Chinese hamster	in vitro	0.1 to 7.5 µg/ml without activation and 0.5 to 50 µg/ml with activation	duplicate cultures	AGE was tested both without and with exogenous metabolic activation in Chinese hamster ovary (CHO) cells at the HGPRT locus. AGE is not a gene mutagen in mammalian (CHO) cells in culture either without or with metabolic activation.	63 FR 25040; 5/6/98 Docket# OPPTS-44648
AGE	120547-52-6	HEGTOXMUTA Reverse Mutation Assay	40 CFR 798.5265	*Salmonella typhimurium*	*in vitro*	10-5000 ug/plate	Not applicable	The test material is a gene mutagen in prokaryotes in strain TA1535 with or without activation with a dose response. It was not mutagenic in other tested strains. [EPA]	63 FR 1464; 1/9/98 Docket# OPPTS-44645
AGE	120547-52-6	HENEUR Motor activity, subchronic	40 CFR 798.6200 (modified)	F344 rat	dermal, 5 d/wk 13 weeks	1, 10, 100 mg/kg bw	12/sex	There was no evidence of treatment-related systemic toxicity and no effect on motor activity. The only treatment-related findings were skin irritation in mid- and high-dose rats. High-dose males had well-defined erythema, edema and scaling which severity decreased over the exposure period. Female in this group had less severe skin lesions. Mid-dose male and female rats had low incidence of very slight erythema and slight scaling. The NOEL for skin irritation was 1 mg/kg.	63 FR 1540; 3/31/98

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AGE	120547-52-6	HENEUR Electrophysiology, subchronic	Non-TSCA Protocol/Guideline (see docket# OPPTS-42185)	F344 rat	dermal, 5 d/wk 13 weeks	1, 10, 100 mg/kg bw	10/sex	There was a treatment-related change in flash-evoked potentials from the cerebellum (FEP-C) which showed dose-related and sex-related qualitative differences in waveforms. The early-latency components of the FEP-C were significantly smaller in mid- and high-dose male rats. The females had larger components than controls. Since the waveform changes might be due to the eye or optic nerve, the FEPs of the remaining male rats were examined at 5 weeks post-exposure. The dose-reponse pattern was still present and electroretinograms were collected from high-dose and control male rats; the high-dose rat ERGs were significantly smaller (38%) than controls. Histopathologic examination of retinas from high-dose male and female rats did not show any treatment-related pathologic alterations. The NOEL for this effect was 1 mg/kg. [EPA]	63 FR 1540; 3/31/98
AGE	120547-52-6	HENEUR Neuropathology, subchronic	40 CFR 798.6400 (modified)	F344 rat	dermal, 5 d/wk 13 weeks	1, 10, 100 mg/kg bw	5/sex	There were no treatment-related gross or histopathologic lesions in the central or peripheral nervous system. [EPA]	63 FR 1540; 3/31/98
AGE	120547-52-6	HENEUR Functional Obser-vational Battery, subchronic	40 CFR 798.6050 (modified)	F344 rat	dermal, 5 d/wk 13 weeks	1, 10, 100 mg/kg bw	12/sex	There were no treatmment-related neurotoxic effects observed at any dose level. There were no significant differences among groups in grip strength, landing foot splay or rectal temperature. [EPA]	63 FR 1540; 3/31/98
AGE	120547-52-6	HERTOXTERA Developmental Toxicity screen	Non-TSCA Protocol/Guideline (see docket# OPPTS-42185)	Sprague-dawley rat	dermal, 6 hr/d, gestation days 6-15	1, 10, 50, 100, 200 mg/kg bw	8 females/group pregnant	Dermal irritation at the application site was noted in rats from the three highest doses. The severity and time of onset were dose-related. No maternal or developmental toxicity was apparent at any dose level and the NOEL for these effects was at least 200 mg/kg. The NOEL for maternal dermal irritation was 10 mg/kg. [EPA]	63 FR 1464; 1/9/98
AGE	120547-52-6	HESTOX Subchronic Toxicity with testicular assessment	Non-TSCA Protocol/Guideline (see docket# OPPTS-42185)	F344 rat	dermal, 90-day 6hr/d, 5d/wk, 13 weeks	1, 10, 100 mg/kg bw	10/sex/dose	There was no evidence of systemic toxicity. Detailed examination of both testes and spermatogenetic cycle staging did not reveal testicular toxicity. The application site from the high dose rats showed dermal irritation, scaling and fissuring. Histologic examinations of the skin showed hyperkeratosis, epidermal hyperplasia, and a mild subacute to chronic inflammatory response. The rats from the 10 mg/kg group had slight scaling at the application site during the final weekof the study, but no histopathologic changes. The NOEL for dermal irritation was 1 mg/kg. [EPA]	63 FR 1464; 1/9/98

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DGEBPA	1675-54-3	EFTSPT Glove permeability test	ASTM F 739-91	Not applicable	8 hr	neat DGEBPA and 3 mixtures containing DGEBPA	Not applicable	Of the chemically protective gloves tested for permeation resistance to DGEBPA, Safety 4 4H EVAL laminated glove and North B-174 butyl rubber gloves would offer the most protection since they prevented permeation during the 8-hr period with all 4 test substances. The remaining gloves (Edmont 8-352 neoprene, Pioneer AF-18 nitrile, and Edmont 4-412 PVC) showed no breakthrough with DGEBPA resin while exhibiting mean breakthrough times with the 3 mixtures ranging from 9 to 50 min. Following breakthrough, the Edmont 4-412 showed degradation with all 3 mixtures as evidenced by liquid penetration after 30-126 min of contact. Edmont 8-352 showed liquid pentration after 360 minutes of contact with DGEBPA/ alkyl C_{12}-C_{14} glycidyl ether mixture.	received 7/31/95
DGEBPA	1675-54-3	HECTOXCARC 2-year Bioassay	40 CFR 798.3320 (modified)	Fischer 344 rats	dermal	0, 1, 100 and 1000 mg/kg	groups of 70 female	There was no evidence of dermal carcinogenicity under the conditions of these studies. There was, however, some uncertainty regarding the significance of the finding of some low incidences of tumors in the oral cavity in the rat study as discussed in enclosed evaluation..	63 FR 67067, 12/4/98 Docket # OPPTS- 44650
DGEBPA	1675-54-3	HENEUR Functional Obser-vational Battery, subchronic	40 CFR 798.6050 (modified)	rat	dermal, 13 wks	10, 100, 1000 mg/kg	12/sex	The only effect clearly related to treatment was a decrease in body weight at 1000 mg/kg in both sexes. The NOEL for dermal exposure to DGEBPA was 100 mg/kg for both male and female rats.	61 FR 36378; 7/10/96, Docket# OPPTS-44628
DGEBPA	1675-54-3	HENEUR Neuropathology, subchronic	40 CFR 798.6400 (modified)		dermal, 13 wks	10, 100, 1000 mg/kg	12/sex	The only effect clearly related to treatment was a decrease in body weight at 1000 mg/kg in both sexes. The NOEL for dermal exposure to DGEBPA was 100 mg/kg for both male and female rats.	61 FR 36378; 7/10/96, Docket# OPPTS-44628
DGEBPA	1675-54-3	HENEUR Motor activity, subchronic	40 CFR 798.6200 (modified)		dermal, 13 wks	10, 100, 1000 mg/kg	12/sex	The only effect clearly related to treatment was a decrease in body weight at 1000 mg/kg in for both sexes. The NOEL for dermal exposure to DGEBPA was 100 mg/kg for both male and female rats.	61 FR 36378; 7/10/96, Docket# OPPTS-44628
DGEBPA	1675-54-3	HERTOXTERE Reproductive Toxicity	40 CFR 798.4700 (modified)	rat	gavage, 14 wks (P1), 12 wks (P2)	50, 540, 750 mg/kg	30/sex	Administration of DGEBPA to adult rats resulted in a decrease in body weight in the 540 (males) and 750 mg/kg (males and females) dose groups in both generations. Secondary changes in absolute and/or relative and liver and kidney weights were also observed in these dose groups. There were no treatment-related histologic changes noted nor effects on reproductive performance in any dose group. The NOEL for adult males was 50 mg/kg and 540 mg/kg for adult females. The NOEL for reproductive effects was 750 mg/kg for this study.	61 FR 25224; 5/20/966, Docket# OPPTS-44626

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DGEBPA	1675-54-3	HESTOX Subchronic Toxicity	40 CFR 798.2250 (modified)	rat	dermal, 13 wks	10, 100, 1000 mg/kg	10/sex, 10 female (satellite group at 1000 mg/kg)	DGEBPA applied to the skin of rats five time per week for approximately 13 weeks caused no apparent systemic toxicity with the exception of decreased body weight and body weight gain in males and females at 1000 mg/kg. Food consumption was also slightly lower. Increased serum cholesterol values were noted in mid- and high dose l rats, but were considered of questionable toxicological significance since no correlated histopathological changes were observed. Female rats in the high-dose satellite group dosed 3 times per week showed no signs of systemic toxicity. Epidermal hyperplasia with chronic inflammation, characterized as chronic dermatitis, was observed histopathologically at all dose levels for male rats and in female rats at 100 and 1000 mg/kg dose levels and the high-dose satellite group.	61 FR 36378; 7/10/96, Docket# OPPTS-44628
DGEBPA	1675-54-3	HESTOX Subchronic Toxicity	40 CFR 798.2250 (modified)	B6C3F1 mice	dermal, 13 wks	1, 10, 100 mg/kg	10	DGEBPA applied to the skin of male mice 3 times per week for 13 weeks caused no apparent systemic toxicity. Mild to moderate chronic active dermatitis with a weak dose-response was observed at dosages up to 100 mg/kg. Spongiosis and epidermal micro abscess formation indicated that the maximum-tolerated dose was met in mice administered 100 mg/kg DGEBPA.	61 FR 25224; 5/20/96, Docket# OPPTS-44626